

**B-12 Mass production of *Verticillium lecanii* a potential fungal pathogen for the control of sucking pests**

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An entomopathogenic fungus, *Verticillium lecanii* was isolated from dead/infected bean whitefly (*Bemisia tabaci*) collected from Bandarawela area. Preliminary studies showed this strain was virulent on Guava whitefly, *Aleurodicus dispersus* and has the potential to be developed as a fungal insecticide locally for the control of many sucking pests. Studies were undertaken to explore the possibilities of mass culturing this fungus on local media.

Liquid, semi-solid and solid fermentation methods were used in this study. Extracts of potato, bean, carrot were used in liquid fermentation. Cereal grains and rice bran were used as solid substrate in solid and semi-solid fermentation.

*Verticillium lecanii* produced predominantly blastospores in liquid fermentation and conidiospores in solid and semi-solid fermentation. Carrot medium produced both conidio and blastospores. Extract of 20 g of potato produced  $1 \times 10^9$  spore/ml blastospores after 8 weeks incubation which is twice the yield of bean and 4 times that of carrot extracts. In solid fermentation, boiled paddy and cracked rice produced the highest yield of conidia,  $1 \times 10^9$  spore/ml/g substrate, after 8 weeks incubation which is nearly 3 times the yield of boiled and soaked kurakkan. Rice bran did not produce any infective units of this fungi.